**EPR Permit Application**

**For Intensive Poultry Site:**

Ollerton Park Farm,

Ollerton,

Market Drayton,

Shropshire,

TF9 2DP

**Applicant:**

Details: Ollerton Park Farm Limited, Holly Cottage, Burleydam Road, Ightfield, Whitchurch, Shropshire, SY13 4BW

Company Registration Number: 10077147

Contact: Andrew Hollins

Mobile: 07801184377

Tel/Fax: 01948 890266

E-mail: wendyanneevans@hotmail.com

Grid Reference: SJ 64439 25390

**Pre-application number:** EPR/EP3132JL/A001

**Payment Reference**: PSCAPPOLLER001

**Schedule of Appendices – Part B3.5, 15, Application Checklist**

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# Appendix 1 Environmental Management System

Management of the farm is undertaken in compliance with current legislation, relevant Codes of Recommendations and quality assurance schemes (Lion Code of Practice, Freedom Foods). Key requirements are set out in writing and appropriate records must be kept to confirm that standards are maintained.

The day-to-day running of the site is the responsibility of the Directors, who have vast experience of egg production operations. The Directors are also responsible for ensuring that any other workers, including visitors and contractors working on the site also comply with management standards set.

A copy of ‘How to Comply’ is kept on the farm as a guide to environmental permitting requirements.

**Best Available Technique**

The design and operation of the unit has been developed after taking into account the Best Available Techniques defined in the Intensive Rearing of Poultry and Pigs (IRPP) BAT conclusions under Directive 2010/75/EU, article 75(1). The unit will comply with these conclusions.

**Summary of Environmental Management System**

An Environment Management system is in place that covers:

**Normal Operations**

Daily records are kept on all aspects of the farms operation including:

Water consumption, feed consumption and deliveries, bird mortalities, shed temperatures and humidity.

Daily inspections around the site by staff to ensure all plant is operating correctly.

**Maintenance schedule and records**

A programme of planned preventative maintenance is carried out on all plant equipment including ventilation fans, feed and water systems. Inspections and maintenance schedules are based on the manufacturer recommendations.

Generators are tested weekly to ensure they are working properly.

The buildings and equipment on site is regularly inspected and checked for visual signs of leakage, corrosion and structural damage, security and correct operation.

A record of all faults, maintenance work and inspections is kept in the site office.

**Incidents and abnormal operations**

Measures are in place to identify incidents and abnormal operations. Staff are trained to be able to detect and abnormal operation and investigate its causes and get back to normal operation and ensure the problem does not reoccur.

**Complaints system**

Complaints are logged and referred to the site manager for investigation and follow up action. A record is kept of any remedial action to prevent or minimise the causes and we will respond to concerns raised by the local community as appropriate.

On receipt of the EPR permit we will place a site identification notice at the entrance of the site clearly visible from a public highway in accordance with How to Comply.

**Accidents**

The site has an accident management plan which will be implemented if an accident occurs.

**Climate Change**

The site is expected to be operational for up to 20 years and uses groundwater as part of its operations. A risk assessment has been undertaken and measures are in place to track any material changes in operating temperature ranges, peak river levels to enable timely changes to operating processes.

**Decommissioning**

A site has a decommissioning plan. This plan indicates how buildings, infrastructure, and any remaining manures and wastes will be dealt with if the site is closed or decommissioned.

**Training**

All staff are suitably qualified to work at the installation. All staff receive formal training from the site manager, including formal training on Health and Safety, the accident management plan and will be trained about the requirements of the EPR permit and pollution prevention.

New staff are mentored as part of their “on the job” training.

Staff and contractors have defined roles.

Training and instruction of staff and contractors is recorded in the training plan.

**Site Security**

The site does not have a secure perimeter fence although it is well hidden from the nearby road by trees and a hedgerow and a stock proof fence.

Sheds are securely locked at night and are monitored with CCTV cameras.

The site gates are locked at night to prevent vehicle access out of hours.

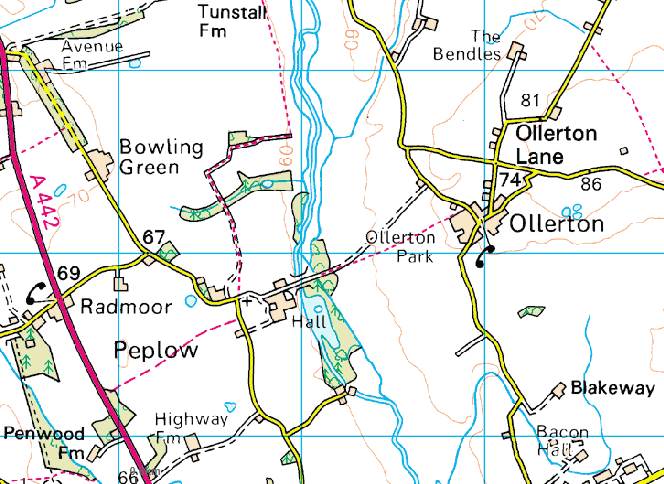
The fuel oil tanks are secure.

Signs are placed at the entrance to the site to warn people against entering the site.

**There are no public footpaths through the site. There is a footpath in the adjoining field going directly from Ollerton village to the access gate to Peplow Hall**

# Appendix 2a - Ollerton Park Farm - Location Map

Address - **Ollerton, Market Drayton, Shropshire, TF9 2DP**





**Flood Risk Map**

The site location is in an area at very low risk of flooding



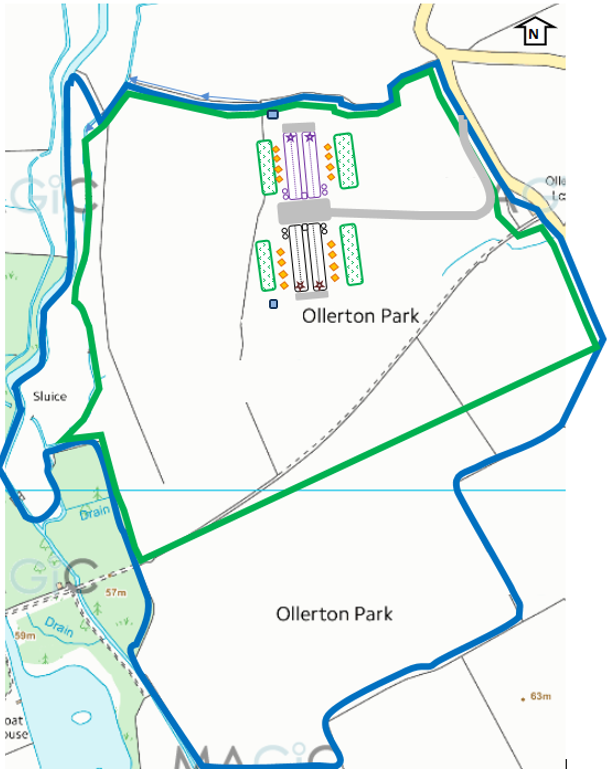


Grid Reference: SJ644253

**Site Boundary**

Flood Risk - Ollerton

# Appendix 2b – Ollerton Park Farm - Site Map



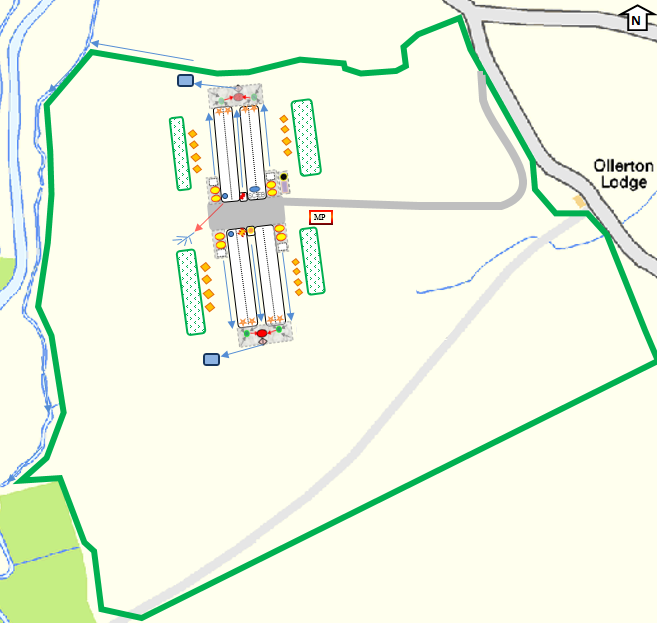
**Key:**

|  |  |  |  |
| --- | --- | --- | --- |
|  | Free Range Site Boundary |  | Site Access Tack and Hard standing |
|  | Farm Boundary |  | Current Sheds |
|  | New Tree Planting |  | Proposed Sheds - subject to planning |
|  | Bird scratching areas (Sand boxes) |  | Ventilation Emission point |
|  | Attenuation Pond |  | Ditch Water flow |

Not to scale

Last updated 28 February 2021

# Appendix 2c - Ollerton Park Farm - Drainage Map



**Key**: Not to scale

|  |  |  |  |
| --- | --- | --- | --- |
|  | Free Range Site Boundary |  | Site Access Tack and Hard standing |
|  | Feed Bin with dust collector |  | Concrete Area |
|  | Feed Weighing |  | Direction of Water Flow |
|  | Poultry Shed |  | Lightly soiled water flow |
|  | Ventilation Emission point |  | Direction of Dirty Water |
|  | Attenuation Pond |  | Dirty Water Tank |
|  | Septic Tank |  | Drain |
|  | Generator |  | Diverter Valve |
|  | Bunded Fuel Store | SC | Water Stop Cock |
|  | Bunded Chemical Store | EB | Electricity Supply Isolator |
|  | Fire Extinguisher |  | Clean Water Tanks |
|  | Spilllage Kit |  | Soakaway |
| EXIT | Emergency Exits | MP | Meeting Place |

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# Appendix 3 – SITE CONDITION REPORT

For full details, see H5 *SCR guide for applicants* v2.0 4 August 2008

**COMPLETE SECTIONS 1-3 AND SUBMIT WITH APPLICATION**

**DURING THE LIFE OF THE PERMIT: MAINTAIN SECTIONS 4-7**

**AT SURRENDER: ADD NEW DOC REFERENCE IN 1.0; COMPLETE SECTIONS 8-10; & SUBMIT WITH YOUR SURRENDER APPLICATION.**

|  |  |  |
| --- | --- | --- |
| **1.0 SITE DETAILS** | |  |
| Name of the applicant | Ollerton Park Farm Limited | |
| Activity address | Ollerton Park Farm, Ollerton, Market Drayton, Shropshire, TF9 2DP | |
| National grid reference | SJ 644253 | |

|  |  |
| --- | --- |
| Document reference and dates for Site Condition Report at permit application and surrender | 1st February 2021 |

|  |  |
| --- | --- |
| Document references for site plans (including location and boundaries) | Appendix 2 Location Plan and Site Plan : |

**Note:**

In Part A of the application form you must give us details of the site’s location and provide us with a site plan. We need a detailed site plan (or plans) showing:

* Site location, the area covered by the site condition report, and the location and nature of the activities and/or waste facilities on the site.
* Locations of receptors, sources of emissions/releases, and monitoring points.
* Site drainage.
* Site surfacing.

If this information is not shown on the site plan required by Part A of the application form then you should submit the additional plan or plans with this site condition report.

|  |  |  |
| --- | --- | --- |
| **2.0 Condition of the land at permit issue** | | |
| Environmental setting including:   * geology * hydrogeology * surface waters | | The installation covers approximately 49 hectares.  The surrounding land is predominantly used for arable and grass farming, with some light industrial use to the East.  The site itself is flat and most of the surrounding land is flat or gently undulating.  The British Geology Survey map shows that the main bedrock geological unit underlying the site is Salop Formation - Mudstone, Bridgnorth Sandstone And Conglomerate. Sedimentary Bedrock formed approximately 272 to 310 million years ago in the Permian and Carboniferous Periods. Local environment previously dominated by rivers.  The superficial deposits are River Terrace Deposits, Sand And Gravel.  Topsoil over the entire site is sandy loam. It is classified as slowly permeable seasonally wet slightly acid but base-rich loamy and clayey soils  According to the postcode search facilities on the Environment Agency website, the site is not in a Groundwater Catchment Area, nor is it within a Source Protection Zone. However, the site is within a Nitrate Vulnerable Zone (confirmation of this is shown in the Defra website). |
| Pollution history including:   * pollution incidents that may have affected land * historical land-uses and associated contaminants * any visual/olfactory evidence of existing contamination * evidence of damage to pollution prevention measures | | Pollution Incidents:  None known  Current use or activity:  Poultry Production (proposed)  Potential polluting substances:  See Assessment of land pollution risk.  Previous use or activity:  General agricultural use, grass / cereals rotation (prior to 2016)  Potential polluting substances:  None known.  The drainage ditches on the site are visually inspected on a regular basis for any signs of pollution. |
| Evidence of historic contamination, for example, historical site investigation, assessment, remediation and verification reports (where available) | | Not applicable |
| Baseline soil and groundwater reference data | | No formal assessments have been made of the soils on the site. |
| **Supporting information** | * Source information identifying environmental setting and pollution incidents * Historical Ordnance Survey plans * Site reconnaissance * Historical investigation / assessment / remediation / verification reports * Baseline soil and groundwater reference data | |

|  |  |
| --- | --- |
| **3.0 Permitted activities** | |
| Permitted activities | Four poultry houses for free range egg production in an aviary system, with a total of 64,000 places.  The working area where vehicles operate and the area surrounding the houses is to be laid with concrete or stone. Dust deposited on hard standing within the site is regularly swept up and disposed of in accordance with the DEFRA Code of Good Agricultural Practice for the Protection of Water.  Feed is delivered in covered lorries and stored on-site in galvanised steel bins.  On a weekly basis the fresh poultry manure is removed from the building on a conveyor into a trailer that is then covered when full. This is spread onto separately owned agricultural land. Once the houses have been depopulated, litter is removed from the site in covered vehicles. This is spread onto separately-owned agricultural land. The houses are dry cleaned with compressors and disinfected ready for the next crop.  Dead birds are removed from the houses daily and the numbers recorded. Carcasses are held in deep freezers until full then they are placed in covered vermin-proof bins until they are removed from site under the Fallen Stock Scheme.  Diesel is stored in a bunded fuel tank. Small quantities of disinfectant concentrate and other chemicals are stored in sealed containers in the chemical store. |
| Non-permitted activities undertaken | Not applicable |
| Document references for:   * plan showing activity layout; and * environmental risk assessment | Appendix 2 Location Plan and site plan  Appendix 6a H1 Assessment |

# Appendix 4 Non-Technical Summary

Summary of regulated facility

Summary of key technical issues

The Farm is operated by Ollerton Park Farm Limited and once building is completed will have a capacity for 64,000 free range egg layer places housed in an aviary system across four poultry houses. The site capacity is subject to planning permission being granted for the poultry houses.

The Farm currently compromises 32,000 free range egg layer places housed in an aviary system across two poultry houses, together with additional agricultural land.

The sheds would be newly constructed, built of steel, with a steel sheet roof and sited on a concrete base. All walls and roofs are fitted with insulation. In each poultry house the ventilation is provided by side inlets with low noise, high velocity ridge outlets in the roof of the building.

The layer production cycle covers 60 weeks with point of lay hens purchased at 16 weeks of age and retained on site until they reach 76 weeks old, following which they are sold and replacement birds purchased. The downtime between flocks is 2-3 weeks to allow time for clean out and completion of any maintenance or repairs prior to the arrival of the new flock.

Feed is purchased from a separately-owned feed mill and it is stored on site in fully-enclosed galvanised steel bins. Diets are formulated according to the birds’ requirements and the stage of growth. Protein and phosphorus levels are reduced over the laying period. Water is provided via nipple drinkers which are designed to minimise spillage. This, together with good environmental control in the houses helps to maintain good litter condition and hence reduce ammonia and odours. Water use in each house is monitored daily by meters. Low energy lighting systems are used throughout the site.

Bird mortalities are removed each day and the numbers are recorded. The carcasses are held in deep freezers prior to having sufficient volumes for collection under the Fallen Stock Scheme when the carcases are then transferred into covered, vermin-proof bins ready for collection.

At the end of the laying period, all birds are removed from the houses and the used litter is taken away from the site in covered vehicles and spread onto separately owned agricultural land. A dry clean down and disinfection takes place ready for the next crop.

# Appendix 5 Technical Standards

**Operations**

The operation of the farm will be in accordance with Sector Guidance Note (SGN) EPR6.09.

**Best Available Technique**

The design and operation of the free range egg production unit has been developed after taking into account the Best Available Techniques defined in the Intensive Rearing of Poultry and Pigs (IRPP) BAT conclusions under Directive 2010/75/EU, article 75(1).

A review has been conducted and the unit will be able to comply with these conclusions. Specifically the site will confirm with the monitoring aspects as detailed below:

1. **BAT conclusions 3 and 4:**

These require the site to adopt a nutritional strategy to reduce the levels of nitrogen (N) and phosphorus (P) excretion and demonstrate you are meeting the BAT associated excretion levels given in table 1.1 and table 1.2.

The site will operate a Multiphase feeding approach with a diet formulation adapted to the

specific requirements of the production period. In this way the site will achieve levels of Nitrogen excretion below the required BAT-AEL of 0.8 kg N/animal place/year and levels of Phosphorous excretion below the required BAT-AEL of 0.45 kg P2O5 /animal place/year based on a mass balance of N or P based on the feed intake, dietary content of crude protein, total N or P, and animal performance. Calculations will be made to estimate N and P and these will be reported annually as required.

1. **BAT conclusion 25:**

This describes 3 techniques for monitoring ammonia emissions and allows for emission levels to be demonstrated through the use of emission factors.

The site will demonstrate that it achieves levels of ammonia emissions below the required BAT-AEL of 0.13kg NH3/animal place/year based on using estimates based on published ammonia emission factors.

1. **BAT conclusion 27:**

This describes 2 techniques for monitoring dust emissions and allows for emission levels to be demonstrated through the use of emission factors.

The site will demonstrate that it achieves dust emissions by using estimates based on published dust emission factors.

**Feed**

Protein is reduced over the laying cycle by providing different feeds.

Phosphorus levels in rations are reduced over the laying cycle.

Feed storage bins are specifically designed to accommodate the required feeding regime.

**Housing**

The housing is well insulated and the sheds have a damp proof course.

The sheds are fan ventilated with a fully littered floor equipped with non-leaking drinking systems.

Litter is kept loose and friable. The quality is regularly inspected to ensure it does not become excessively wet or dry. Steps will be taken to rectify any changes to the quality of the litter.

Temperature in the sheds meets the health and welfare needs for the age and number of the birds.

The fans are fitted with back draft shutters to prevent drafts and unnecessary heat loss.

The shed is accessed via the control room/vestibule area, which prevent drafts.

A computer automatically controls ventilation.

The ventilation management system controls the ventilation rates depending on the health and welfare needs of the birds and the outside weather conditions.

**General Management**

In accordance with the management system at the farm, the buildings are regularly inspected and maintained. The floors and walls of the sheds are kept clean.

The site is regularly inspected and well maintained.

**Livestock Numbers and Movements**

A system is in place to record the number animal places and animal movements.

These records will be available for inspection.

**Slurry spreading and manure management planning - off site-activity**

Litter is not stored at the installation.

Litter is not spread on land belonging to the Operator.

Litter is exported from the installation. Records are kept of the quantities and the date of transfer of the litter to farmers.

Contingency arrangements are in place with surrounding farms to accept the manure in case of an emergency.

In these circumstances where the litter is exported for spreading to land, records are kept of the names and addresses of the receiving farms.

The receiver of the manure confirms by signing a docket that litter is spread to land in accordance with the Code of Good Agricultural Practice, or in accordance with the manure management plan for the receiving land.

**Improvement Programme**

The additional drainage required for the extended site will meet the requirements of the SGN EPR6.09.

**Emissions and Monitoring**

**Table of emission points**

Emission point description/source and location Source

**Air**

Gable end, roof mounted fan outlets on all sheds shown on the site layout plan

All poultry shed gable ends

Vent from fuel oil tank for generator shown on site plan

Generator fuel oil tank

Exhaust on generator as shown on site layout plan

**Land**

Attenuation Basin and Soakaways as identified on the site drainage plan Roof water from the sheds and rear gable end yard area to each shed.

**Water**

Outlets from field drains discharging to off-site ditch as shown on the site drainage plan.

Land drains and attenuation basin

**There are no emissions to groundwater of list I or list II substances.**

**Fugitive Emissions**

Appropriate measures for preventing and minimising fugitive emissions are in place.

Buildings are maintained in good repair.

Areas around buildings are kept free from build-up of manure, slurry and spilt feed.

Footbaths are managed so that they do not overflow.

Drainage from the concrete yard to the rear of the animal housing during the cleaning out period is collected in an underground storage tank as shown on the site drainage plan. Diverter valves are used during clean out periods to prevent the contamination of surface water systems and to divert the contaminated water to the dirty water tanks. Clean drainage systems are not contaminated. The poultry houses are dry cleaned at the end of each crop with compressors and vacuum cleaners reducing the risk of contamination to drainage systems.

**Dust**

Feed is stored in purpose built covered feed silos located next to the sheds.

No milling or mixing of feed takes place at the farm. All feed is delivered to the farm by lorry from feed suppliers. Feed is blown directly from the lorry into the storage silos. Feed is piped from the silos to the sheds minimising dust emissions.

Ventilation systems are operated to achieve optimum temperature levels for the stage of production in all weather and seasonal conditions.

Control of minimum ventilation rates is planned to avoid the build-up of moisture in the house.

The sheds are managed to maintain the poultry litter is as dry and friable condition as possible. Dust is controlled through the management of litter and air quality.

Rainwater run off from the roof for each shed is collected by the guttering system and routed to the attenuation basin as indicated on the site drainage plan.

The ventilation system in each house has gable end roof outlet fans. Rainwater run off around the gable end of the shed is collected by the drainage system which directs lightly contaminated runoff to the attenuation basin as indicated on the site drainage plan.

Litter is not stored on the site.

**Carcass management**

Fallen stock is disposed of in accordance with the Animal By-Products Regulations 2003. Carcasses are stored in freezers on site prior to collection in sealed containers under the fallen stock scheme.

**Flies**

There have been no incidents of fly nuisance at the farm. Appropriate actions will be put into place to prevent and control flies should a nuisance arise.

**Bunding and containment**

Agriculture Fuel oil and other chemical storage

The fuel oil storage tank for the generator is bunded. The bunds meet the requirements of the Control of Pollution (Silage, Slurry and Agricultural Fuel Oil) Regulations 1991 (amended 1997) and meet the requirements outlined in SGN EPR6.09. The tanks are regularly inspected.

Pesticides and veterinary medicines are kept in a store capable of retaining spillage, resistant to fire, dry, frost free and secure.

**Foodstuff**

Feed is kept in silos adjacent to the sheds. No liquid feed is stored at the site.

The silos are protected from collision damage by guard rails.

**Dust or Bio aerosol**

There are no neighbours (sensitive receptors) within 100m of the primary buildings and critical emission points which are located at the centre of the site. There are 2 neighbouring properties including the linked site manager dwelling (Ollerton Lodge) are within 100m of the installation boundary.

There is no history of dust or bio aerosol complaints resulting from the current activities at the farm.

In accordance with the SGN EPR6.09 and the H1 assessment refer to the Dust or Bio aerosol Management Plan

**Odour**

There are no neighbours (sensitive receptors) within 350m of the primary buildings and critical emission points which are located at the centre of the site. There are 37 neighbouring properties within 400m of the installation boundary.

There is no history of odour complaints resulting from the current activities at the farm.

In accordance with the SGN EPR6.09 and the H1 assessment refer to the Odour Management Plan

**Noise and vibration**

There are no neighbours (sensitive receptors) within 350m of the primary buildings and critical emission points which are located at the centre of the site. There are 37 neighbouring properties within 400m of the installation boundary.

There is no history of noise complaints resulting from the current activities at the farm.

In accordance with the SGN EPR6.09 and the H1 assessment refer to the Noise Management Plan.

# Appendix 6a – H1 ENVIRONMENTAL RISK ASSESSMENT

**SITE:** Ollerton Park Farm

**NOTES:**

Hazard : A property or situation that in particular circumstances could lead to harm

Consequences: The adverse effects or harm as the result of realising a hazard which causes the quality of human health or the environment to be impaired in the short or long term

Risk: A combination of the probability of occurrences of a defined hazard and the magnitude of the consequences of the occurrences

**ABBREVIATIONS USED:**

|  |  |
| --- | --- |
| **Consequences of Hazard:**  A: Minor Injury  B: Major Injury  C: Death  D: Air Pollution  E: Water Pollution  F: Land Pollution | **Pathways - Examples:**  Air  Water  Ground  Direct Channel |

**Effect of Consequences:**

S: SEVERE (Management required in all cases)

MO: MODERATE (Management required in most cases)

MI: MILD (Management required in occasionally in some cases)

N: NEGLIGIBLE (Management not required)

**Note:** Management is the action required to reduce the risk of a hazard causing a problem on the site.

Contingency measures are procedures which are in place to reduce the consequences of a hazard.

**Risk estimation and evaluation** - Probability / frequency or occurrence of hazard

1: HIGH - could occur any working day

2: Medium - Could occur regularly - management / contingency required

3: Low - event possible - contingency measures / management advisable

4: Negligible - event unlikely - contingency measures / management advisable but not necessary

**Risk Assessment Outcomes**

The risk estimation and consequences are combined to derive the level of priority for management action.

High, Medium, Low, Near Zero, Zero

**ENVIRONMENTAL RISK ASSESSMENT REVIEW**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Hazard / Contaminant / Situation** | **Source** | **Pathway** | **Receptor** | **Conseq**  **uence** | **Effect** | **Prob**  **ability** | **Assessment of Outcome** | **Remedial Action** |
| Hydrocarbons | Unbunded Fuel Tank, drips when refueling, during delivery, leakage from stored containers | Surface  Groundwater | Surface, Aquatic Flora and Fauna  Groundwater users | A B D E F | Mi-S | 2 | Medium | Investigate area around fuel tank when carrying out work and ensure all containers are sealed and stored securely |
|  | Migration onto site from contaminated ground and above sources | Surface  Groundwater | Surface, Aquatic Flora and Fauna  Groundwater users | A B D E F | Mi-S | 3 | Low | No areas of infill on site |
| Landfill / ground gases: explosions / Asphyxiation | Coal workings or infilled ground | Ground  Services | End users / occupiers | A B C | S | 3 | Low | No workings identified and no areas of infil on site |
| Leachiate and heavy metals | Storing / spreading of slurry / manure / litter | Ground | Surface / Ground water end users | E F | Mi-S | 3 | Low | Adhere to manure management plan / COGAP |
|  | Infilled ground | Surfacewater  Groundwater | Bore hole end users, aquifer, abstractors, fish, invertebrates | A B C E F | Mi-S | 3 | Low | No areas of infill on site |
| General Ground Contamination | Washout water, plant failure, chemical /fuel spillage | Ground  Water | Surface, Ground water end users | A B C D E F | Mi | 3 | Low | Dry clean out, use of secure store and holding tanks. No evidence of historical problem |
| Release of gases, fumes, vapours volatiles | Spillage of Chemicals Ammonia from litter | Air, Ground  Water | Occupiers, workers, adjacent properties | A B C D E F | Mi-S | 3 | Low | Good Litter Management, regular clean out and storage in properly designated areas |
| Waste | Stored Waste | Air - high winds | Surface water, ground, Reduce Visual amenity | A B C F | Mi | 4 | Low | Store in enclosed skips, remove off site regularly |
| Fire - smoke particulates | Burning materials onsite | Air | Workers, adjacent properties | A B C D | Mi-S | 3 | Low | No onsite burning or incineration takes place, fire extinguishers available for on site emergency |
| Noise / Vibration | Plant and Machinery | Air | Workers, adjacent properties | A D | Mi-Mo | 3 | Low | Equipment maintained to manufacturer instructions, use of augers |
| Dust Particulates | Site surfaces, friable litter, ventilation system | Air | Workers, adjacent properties | A B D | Mi-Mo | 3 | Low | Clean surfaces, god litter management, efficient ventilation system |
| Odour | Stored Products, spent litter, manure, dead birds | Air | Workers, adjacent properties | A D | Mo | 2 | Medium | Good house keeping, proper storage and disposal of waste, use of fallen stock scheme |

# Appendix 6a – Ammonia Screening

**SITE:** Ollerton Park Farm

Pre-application number: EPR/EP3132JL/A001

**Pre-application Report**

We have completed an initial ammonia screening assessment for your proposal to identify if you will need to submit a detailed modelling assessment with your application.

The screening assessment is based on your proposal to operate a farm which is permitted to stock 64,000 free range laying hens.

**Summary of the assessment:**

The ammonia screening results carried out by the Environment Agency are only intended to apply to any EPR permit application and not for use in local council planning submissions.

Based on the information you have provided you do not need to submit detailed modelling with your application.

# Appendix 6b – Climate Risk Assessment

**EPR Reference:** New

**Name:** Andrew Hollins

**Operator:** Ollerton Park Farm Limited

**Site:** Ollerton Park Farm

In accordance with the requirement to carry out a climate change risk assessment for any new bespoke waste and installations permit applications if you expect to operate for more than 5 years the assessment is included in appendix 6b i.

The assessment has considered how the operations will be affected by the changes in weather and climate described in the table along with changes to average climate conditions that may impact operations, for example extreme rainfall.

It has also considered:

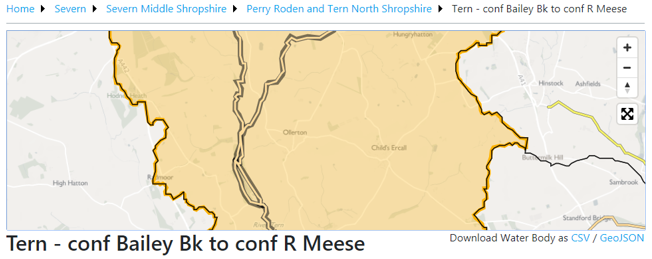
• critical thresholds - where a ‘tipping point’ is reached, for example a specific temperature where site processes cannot operate safely

• changes to averages - for example an entire summer of higher than expected rainfall causing waterlogging

• where hazards may combine to cause more impacts

This worksheet will sit in your management system. It must appear on the management system summary you submit with your application, even if you do not need to submit the whole risk assessment with your application.

**River basin district:** Severn river basin district



Will predicted weather and climate change stop you meeting the conditions in the permit

**Likelihood of Impact:** Estimate the likelihood of the risk occurring

Rating 1: unlikely: circumstances are such that it is improbable the event would occur even in the long term

Rating 2: low likelihood: circumstances are such that an event could occur, but it is not certain even in the long term that an event would occur and it is less likely in the short term

Rating 3: likely: it is probable that an event will occur, or circumstances are such that the event is not inevitable, but possible in the short term and likely over the long term

Rating 4: highly likely: event appears very likely in the short term and almost inevitable over the long term, or there is evidence of the event already happening

**Severity** - Estimate the severity of the potential impact and permit breach

Rating 1: minor impact: short or long-term impact resulting in additional measures for compliance

Rating 2: mild impact: short-term, acute impact to operations resulting in single temporary compliance breach

Rating 3: medium impact: short-term, acute impact to operations resulting in multiple temporary compliance breaches

Rating 4: severe impact: short-term, acute impact to operations resulting in permanent compliance breach(es)

**Appendix 6b i – Severn river basin district: climate change risk assessment worksheet**

**Risk assessment worksheet for the 2050s**

| **Potential changing climate variable** | **A**  **Impact** | **B**  **Likelihood** | **C**  **Severity** | **D**  **Risk**  (B x C) | **E**  **Mitigation**  (what will you do to mitigate this risk) | **F**  **Likelihood**  (after mitigation) | **G**  **Severity**  (after mitigation) | **H**  **Residual risk**  (F x G) |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 1. Summer daily maximum temperature may be around 7°C higher compared to average summer temperatures now. | Ventilation system unable to maintain optimum temperature within livestock housing. | 3 | 2 | 6 | Keep a log of any hot days which occur each year. Install additional cooling system and upgrade building insulation. | 3 | 1 | 3 |
| 2. Winter daily maximum temperature could be 4°C more than the current average. | No negative impact expected. | 4 | 1 | 4 | Minimal impact as buildings insulated and temperature within normal operating parameters of site design | 4 | 1 | 4 |
| 3. The biggest rainfall events are up to 20% more intense than current extremes (peak rainfall intensity)\*. | a) Surface water drainage system overloaded. b) Wash-out into watercourse. c) Overtopping of bunds. | a) 2 b) 2 c) 2 | a) 4 b) 2 c) 2 | a) 8 b) 4 c) 4 | a) Consider surface falls at design stage. b) Drains and lagoons managed. c) Surface water management plan to take increases into consideration. | a)2 | a)2 | a)4 |
| 4. Average winter rainfall may increase by 29% on today’s averages. | Surface water drainage system overloaded. | 3 | 2 | 6 | Increase surface water storage capacity. Consider surface falls at design stage. | 3 | 1 | 3 |
| 5. Sea level could be as much as 0.6m higher compared to today’s level \*. | Inland site. Low impact expected. | 3 | 2 | 6 | Monitor permanent change to local river levels and plan for flood defences as appropriate | 3 | 1 | 3 |
| 6. Drier summers, potentially up to 41% less rain than now. | Increased dust – less water to suppress. | 2 | 2 | 4 | Increase surface water storage capacity (will also help mitigate higher rainfall). | 2 | 1 | 2 |
| 7. At its peak, the flow in watercourses could be 40% more than now, and at its lowest it could be 65% less than now. | At low flow increased stress on the river at discharge point. | 3 | 1 | 3 | Manage the discharge flow rate to avoid impacts. | 3 | 1 | 3 |

Notes:

\*Indicates data has come from climate change allowances as part of the spatial planning process. Evidence from your planning submission is acceptable evidence for this worksheet.

If the pre-mitigation risk score (column D) is 5 or higher, you must complete columns E to H.

# Appendix 6c – Fugitive Emissions

**Impact assessment**

**Major +++, Moderate ++, Minor +, Nil 0, ST – Short Term, MT – Medium Term, LT – Long Term**

| **Source of Emission** | **Emission** | **Receptor** | **Description of impact and duration of impact** | **Significance of negative impacts** | **Mitigation / management measures for this emission** |
| --- | --- | --- | --- | --- | --- |
| 1. Egg production (whilst houses are stocked and at clean-out) | Ammonia | Air  Land  Plants | Possible direct toxic effect on trees (ST)  Nutrient enrichment and acidification of soils (LT)  Changes to sensitive ecosystems (LT) | ++  ++  +++ | * Dry manure maintained * Feed formulated to match flock requirements |
| Dust | Humans  Plants  Land  Water  Air | Nuisance (ST)  Contributor to odours (ST)  Human health – inhalation (LT)  Covers leaves, inhibits photosynthesis (ST)  Nutrient enrichment of soils (LT)  Nutrient enrichment of water courses (MT)  Adverse effect on air quality (ST) | +  +  ++  ++  ++  +  + | * Good design of ventilation systems * Use of good quality feed delivered in sealed systems * Manure is tipped into trailers from minimal height all conveyors are covered * Trailers are covered when full |
| Dirty water (e.g. due to run-off during or after clean-out) | Land  Water | Nutrient enrichment of soils (LT)  Increased BOD in water courses (MT) | +++  +++ | * All dirty water is directed to sealed storage tanks * Manure spilt on roadways during clean-out is swept up |
|  | Noise | Humans | Nuisance (ST) | ++ | * Measures as set out in Noise Management Plan |
|  | Odour | Humans | Nuisance (ST) | ++ | * Measures as set out in Odour Management Plan |
| Zoonoses and notifiable diseases | Humans  Livestock | Human and livestock health implications (ST) | + | * Detailed biosecurity precautions in place e.g. frequent stock inspection, use of disinfectants and appropriate clean overalls, boots etc. for staff and visitors to prevent spread of disease * No risk to public as no public access. |
| Feed (e.g. due to spillage from bins) | Land  Water | Nutrient enrichment of soils (LT)  Nutrient enrichment of water courses (MT) | +  +++ | * Feed bins are regularly checked for signs of damage and wear * Feed bins are protected to prevent collision damage * Augers and filters used and regularly checked |
|  | Pests | Humans | Nuisance caused by vermin and flies | + | * Ongoing pest control regime. * Manure pits seeded with beetles to control fly larvae. * Dry manure maintained |
| 1. Use of vehicles on site | Feed, manure or dirty water (e.g. due to spillage from vehicles) | Land  Water | Nutrient enrichment of soils (LT)  Increased BOD and nutrient enrichment of water courses (MT) | +  +++ | * Any feed spillage beneath bins is cleaned up * Manure is covered in trailers before leaving the site * Machinery used to remove dirty water from tank is kept in optimum working order |
| Noise | Humans | Nuisance (ST) | ++ | * Measures as set out in Noise Management Plan |
| Odour | Humans | Nuisance (ST) | + | * Measures as set out in Odour Management Plan |
| Emissions of acid gases | Air  Humans | Contributing to greenhouse gas emission (LT)  Potential irritation of eyes, nose and throat (ST) | +  ++ | * Equipment is maintained to optimum standards * Compliant with legislation * Generator has been sited such that the risk of nuisance to neighbours is minimised |
| 1. Storage Facilities | Dirty water (e.g. overflow or leakage from collection tank) | Land  Water | Nutrient enrichment of soils (LT)  Contamination of surface and ground waters (MT) | ++  +++ | * Written procedures in place for diverter valve settings and for monitoring tanks during clean-out. * Appropriate staff have been trained |
| Fuels, disinfectants and other chemicals (e.g. due to spills or leakage) | Water  Land | Contamination of surface and ground waters (ST)  Contamination of land (MT) | +++  +++ | * All storage tanks are bunded * Smaller containers are kept in a purpose-built chemical store * Least hazardous products are used where possible |
|  | Health risks due to skin contact with stored materials, inhalation etc. | Humans | Human health issues (ST) | + | * Accident management plan prepared and staff have received training * COSHH risk assessments in place * Spill kits are readily accessible to contain spillage |

**Fugitive Emissions – Risk Assessment**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **What do you do that can harm and what could be harmed** | | | **Managing the risk** | **Assessing the risk** | | |
| **Hazard**  What has the potential to cause harm? | **Receptor**  What is at risk? What do I wish to protect? | **Pathway** | **Risk management**  What measures will you take to reduce the risk? If it occurs – who is responsible for what? | **Probability of exposure**  How likely is this contact? | **Consequence**  What is the harm that can be caused? | **What is the overall risk?**  What is the risk that still remains? The balance of probability and consequence. |
| **Fugitive Emission** |  |  |  |  |  |  |
| **Dust**  Sources: Litter and Feed. | Neighbouring dwelling houses within 400m of the installation: Nuisance, Contributes to odours, Human Health - inhalation. Surrounding vegetation: covers leaves and inhibits photosynthesis. Surrounding land: Nutrient enrichment of soils. | Air | Use of suitable litter materials, litter is tipped into trailers from a minimal height and trailers are covered for transporting.  minimise feed deliveries through sealed lorries and use of dust cyclone. | Low  – A major feed spillage would need to occur at the same time as high winds in order for dust to reach dwellings. | Nuisance – dust on surrounding vegetation, cars, and clothing. Smothering and direct damage to vegetation | Not considered significant for the site provided management controls are adhered with at all times |
| **Ammonia**  Sources: Poultry house & Litter storage | Neighbouring dwelling houses within 400m of the installation: Nuisance, Contributes to odours, Human Health - inhalation. Surrounding vegetation: direct toxic effects and changes to sensitive eco systems. Surrounding land: Nutrient enrichment of soils. | Air | Litter kept dry and friable. Feed formulated to match flock requirements. Measures adopted in accordance with the how to comply – Intensive Farming. | Low  – A H1 risk assessment has been completed for the site. There is negligible impact on nearby wildlife sites. | Aerial deposition and direct toxic effect on trees. Nutrient enrichment of soils and changes to sensitive ecosystems | Not significant |
| **Disease**  Zoonoses and other notifiable diseases | Human Health and livestock health | Air | Detailed biosecurity precautions in place, regular stock inspections, use of disinfectants, clean overalls, boots and masks for staff and visitors to prevent spread of disease | Very Low | Human and livestock health implications | Not significant provided management bio security controls are adhered with at all times |
| **Pests**  Sources – Flies on manure | Neighbouring dwelling houses within 400m of the installation: Nuisance. | Air | Manure is not stored on site, litter is checked and kept dry and friable. Monitoring for any incidence of flies is part of management checks | Low | Flies are a vector of pollution that can harm human health. Concerns can affect amenity and cause offence | Not significant provided management controls are adhered with at all times |
| **Water run off**  Sources – wash water | Run off over land into nearby water course | Land | Poultry sheds are dry cleaned, lightly soiled water is diverted through underground tanks or into attenuation basin. Spilt litter from clean out is swept up | Very Low  – Sheds are dry cleaned | Pollution of water course leading to eutrophication and poisoning of flora and fauna | Not significant provided management controls are adhered with at all times |

**Odour Emissions – Risk Assessment**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **What do you do that can harm and what could be harmed** | | | **Managing the risk** | **Assessing the risk** | | |
| **Hazard**  What has the potential to cause harm? | **Receptor**  What is at risk? What do I wish to protect? | **Pathway** | **Risk management**  What measures will you take to reduce the risk? If it occurs – who is responsible for what?Follow - How to comply with intensive farming | **Probability of exposure**  How likely is this contact? | **Consequence**  What is the harm that can be caused? | **What is the overall risk?**  What is the risk that still remains? The balance of probability and consequence. |
| **Odour Emission** |  |  |  |  |  |  |
| **Feed**  Sources: Manufacture and selection of feed | Neighbouring dwelling houses within 400m of the installation: Contributes to odours. | Air | No mixing or milling on site. Feed formulated set by feed compounders nutrition specialist to match flock requirements. Consumption controlled on timed runs and by feed weighing. | Low | Odour annoyance | Not considered significant for the site provided feed usage is in line with manufacturers requirements. |
| **Feed**  Sources: Delivery & storage | Neighbouring dwelling houses within 400m of the installation: Contributes to odours. | Air | Measures adopted in accordance with the how to comply – Intensive Farming. Minimise feed deliveries through sealed lorries to reduce atmospheric dust and use of a dust collector cyclone. Any spillage is immediately swept up. Feed bins are new, protected by crash barriers, and inspected weekly for signs of damage | Low | Odour annoyance | Not significant |
| **Ventilation**  Poor ventilation leading to humidity and damp/wet litter | Neighbouring dwelling houses within 400m of the installation: Contributes to odours. | Air | New modern design of Shed with concrete floor, insulated walls and ventilation system designed to efficiently remove moisture from house. System is checked weekly. | Very Low | Odour annoyance | Not significant |
| **Drinkers / Litter**  Wet or damp litter from drinker water spillage or poor litter, disease outbreak | Neighbouring dwelling houses within 400m of the installation: Contributes to odours. | Air | Drinker system is nipple drinkers to minimise water spillage and is checked daily. A health plan is in place with veterinary specialist, and stocking densities controlled to avoid overcrowding. | Very Low | Odour annoyance | Not significant |
| **Carcass Disposal**  Inadequate storage of carcasses on site, use of incineration | Neighbouring dwelling houses within 400m of the installation: Contributes to odours. | Air | Carcasses are stored in refrigerated units and disposed of via enclosed containers under the fallen stock scheme. No incineration takes place on site. Shed inspections 4 times a day | Very Low | Odour annoyance | Not significant |
| **Clean Out**  Removal of litter from shed and clean out | Neighbouring dwelling houses within 400m of the installation: Contributes to odours. | Air | Litter is placed directly onto trailers adjacent to sheds. Full trailers are covered for transport. Land spread litter is done in accordance with Farmers manure management plan and NVZ requirements | Low | Odour annoyance | Not significant provided adherence with management controls |

**Noise Emissions – Risk Assessment**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **What do you do that can harm and what could be harmed** | | | **Managing the risk** | **Assessing the risk** | | |
| **Hazard**  What has the potential to cause harm? | **Receptor**  What is at risk? What do I wish to protect? | **Pathway** | **Risk management**  What measures will you take to reduce the risk? If it occurs – who is responsible for what? | **Probability of exposure**  How likely is this contact? | **Consequence**  What is the harm that can be caused? | **What is the overall risk?**  What is the risk that still remains? The balance of probability and consequence. |
| **Noise Emission** |  |  |  |  |  |  |
| **Vehicles**  Large vehicles travelling to from farm  Source: Mobile | Neighbouring dwelling houses within 400m of the installation: Nuisance. | Air | Drive vehicles with due consideration for neighbours. Deliveries to be during daytime 7am-6pm to reduce disturbance unless essential e.g catching. Route traffic away from village, maintain road ways – pot holes | Low | Nuisance – Noise annoyance | Not significant provided adherence with management controls |
| **Vehicles**  Large vehicles on site and during deliveries  Source: Mobile | Neighbouring dwelling houses within 400m of the installation: Nuisance. | Air | Vehicles are well maintained, drivers go slowly and switch engines off when not in use, | Low | Nuisance – Noise annoyance | Not significant provided adherence with management controls |
| **Vehicles**  Small vehicles to, from and on site for workers, visitors  Source: Mobile | Neighbouring dwelling houses within 400m of the installation: Nuisance. | Air | Drivers go slowly and switch engines off when not in use. Highest risk is emergency vans needed for any essential maintenance | Very Low | Nuisance – Noise annoyance | Not significant |
| **Feed**  Transfer from lorry to feed bins  Source: fixed | Neighbouring dwelling houses within 400m of the installation: Nuisance. | Air | Vehicles are well maintained, as are feed bins and augers. Deliveries to be during daytime 7am-6pm to reduce disturbance unless essential | Very Low | Nuisance – Noise annoyance | Not significant |
| **Ventilation Fans**  Operation of fans  Source: fixed | Neighbouring dwelling houses within 400m of the installation: Nuisance. | Air | Well maintained and efficient ventilation fans are used and checked to avoid excessive noise | Very Low | Nuisance – Noise annoyance | Not significant |
| **Generator**  Operation of generator  Source: fixed | Neighbouring dwelling houses within 400m of the installation: Nuisance. | Air | All electrical equipment is maintained and mains electricity is the primary source minimising the need to use the generator as a back up system only with periodic checks done during daytime. | Very Low | Nuisance – Noise annoyance | Not significant |
| **Security Alarms**  Usage of alarms and periodic testing  Source: fixed | Neighbouring dwelling houses within 400m of the installation: Nuisance. | Air | Equipment is well maintained to reduce activation of alarms. Legally required System tests are done during daytime so as to minimise disturbance. | Very Low | Nuisance – Noise annoyance | Not significant |
| **Equipment Repairs**  Repairs to sheds or equipment  Source: fixed | Neighbouring dwelling houses within 400m of the installation: Nuisance. | Air | Equipment is well maintained to reduce the need for repair. Repairs are undertaken with due care so as to minimise disturbance and deal with the incident. | Very Low | Nuisance – Noise annoyance | Not significant |
| **Personnel**  Usage of alarms and periodic testing  Source: mobile | Neighbouring dwelling houses within 400m of the installation: Nuisance. | Air | Staff, catchers and contractors are required to carry out work with due regard for neighbours. Minimising radio noise and avoiding shouting. | Very Low | Nuisance – Noise annoyance | Not significant |
| **Animals Chickens**  Chickens and other animal noise  Source: mobile | Neighbouring dwelling houses within 400m of the installation: Nuisance. | Air | Noise from Birds, Alpacas or sheep during the laying period is considered manageable. Noise and distress during loading is minimised by careful handling. | Very Low | Nuisance – Noise annoyance | Not significant |

**Accident – Risk Assessment**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **What do you do that can harm and what could be harmed** | | | **Managing the risk** | **Assessing the risk** | | |
| **Hazard**  What has the potential to cause harm? | **Receptor**  What is at risk? What do I wish to protect? | **Pathway** | **Risk management**  What measures will you take to reduce the risk? If it occurs – who is responsible for what? | **Probability of exposure**  How likely is this contact? | **Consequence**  What is the harm that can be caused? | **What is the overall risk?**  What is the risk that still remains? The balance of probability and consequence. |
| **Spillages from pesticide handling & storage areas escaping.** | Vulnerable groundwater beneath site. | Cracks in poor impermeable surface and through the ground. | Repair infrastructure and design appropriate containment measures. Maintenance and regular inspection procedure designed and implemented. | Very unlikely. | Contamination of local groundwater and potential nearby abstractions. | Not significant with measures indicated now in place. |
| **Fuel oil in storage tank escaping the containment** | Local water course | The surface water drainage system | Regular inspection in line with the site maintenance and inspection procedure. Barriers in place to prevent vehicles damaging equipment. Levels measured to prevent overfilling. If it occurs the oil spill equipment is located nearby. | Very unlikely | Contamination of local water course | Not significant |
| **Feed spillage** | Local water course | The surface water drainage system | Any spillage of feed around the bin is immediately swept up. The condition of feed bins is checked frequently so that any damage or leaks can be identified in accordance with the site maintenance and inspection procedure. Barriers are in place to prevent collision. | Unlikely | Contamination of local water course | Not significant |
| **Below ground dirty water tank overflows.** | Dirty water flows over yard to clean drain inlet at the back of the office and into local water course. | The surface water drainage system | Block off drain inlet with sand bags. If already entered drain, block off attenuation pond, Accident Management procedures to be activated. Stop cleaning operations. | Unlikely | Contamination of local water course | Not significant |

# Appendix 7 – Odour Management Plan

**Introduction**

The Odour Management Plan is designed as a tool for management to assist in the identification of possible sources of odour and in establishing appropriate solutions to mitigate or minimise the odour.

The Odour Management plan forms an integral part of the sites Environmental Management System and covers the following components:

1. Assess the operation

* Describe the operation, its process, proximity to neighbouring residents, wind direction and site topography.

1. Assess the potential odour sources

* Identify site specific odour sources from a typical free range egg unit covering feed storage, manure management, neighbour relations.
* Identify the procedures followed or planned at the Farm in order to prevent or minimise odour levels.
* Seek to reduce the potential for odour emissions through the use of Best available techniques applicable to the site operation.

1. Respond to odour concerns

* Identify what proactive actions can be taken to manage odour sources
* Establish clear complaint handling protocols which should include the handling of odour complaints.

1. Review and update plan over time

* Odour management is a dynamic process and the odour management plan should be updated and reviewed periodically.

**Environmental Compliance Framework - Odour Management Standards**

EPR permit requirements state that if there are sensitive receptors (neighbouring dwelling houses) within 400 metres of the installation an Odour management plan must be established. Furthermore, the guidance identifies a range of odour impact criteria depending primarily on the nature of the odour (i.e. its pleasantness / unpleasantness) and the likelihood of causing unacceptable impacts.

Environmental Guidance:

* Horizontal Guidance EPR H4 – Odour Management
* Odour Management at Intensive Livestock Installations (IPPC SRG 6.02)
* How to comply with your environmental permit for intensive farming (EPR 6.09)

"Emissions from the activities shall be free from odour levels likely to cause pollution outside the site, unless the operator has used appropriate means, including those specified in an odour management plan, to prevent or where that is not practicable to minimise the odour."

The H4 guidance proposes the use of installation-specific exposure criteria (benchmarks) on the basis that not all odours are equally offensive, and not all receptors are equally sensitive.

The conditions of a Permit balance these installation-specific odour exposure criteria against what is realistically achievable in accordance with the concept of Best Available Techniques (BAT).

The Guidance places odours into three categories with tighter emission thresholds the more offensive the odour as follows:

1. Highly offensive (Tolerance level 1.5 ouE/m3)
2. Moderately offensive (Tolerance level 3.0 ouE/m3)

* *includes intensive livestock rearing*

1. Less offensive (Tolerance level 6.0 ouE/m3)

These benchmark limits may be relaxed in cases where the source is familiar to the location. This is particularly the case in relation to intensive agriculture in a rural setting.

For the poultry sector the guidance states that ‘the indicative exposure level criterion, which equates to ‘no pollution’, i.e. no reasonable cause for annoyance is: **3 ouE/m3** as a 98th percentile of hourly means at sensitive receptors, with such an adjustment as is appropriate to take account of local circumstances.’

The nature of intensive farming means that preventing odour generation at source is rarely possible as animals are inherently odorous. However, there are many things that can be done, often at low cost, to minimise odour or to prevent it reaching neighbours. In most cases, attention to housekeeping and good operational practices should achieve a significant reduction in the level of exposure experienced at sensitive receptors.

**Site Details**

**Location**

The Farm is operated by Ollerton Park Farm Limited and once building is completed will have a capacity for 64,000 free range egg layer places housed in an aviary system across four poultry houses.

The farm is located at Ollerton Park Farm, Ollerton, Market Drayton, Shropshire, TF9 2DP.

The site map reference is: SJ 644253

There are some sensitive receptors within 400 meters of the site (see appendix for relative distances for sensitive receptors within the locality).

**Production Cycle**

As with the existing operation, the proposed shed will be of modern design, utilising the current best practice control measures for minimisation of odour impact, including belt systems for manure collection and twice weekly manure removal.

The birds arrive at the facility in one batch, at around 16 weeks old and remain for 13 months before they are replaced with the next batch. Free range birds are able to roam freely around the farm in a ranging area which is managed in accordance with a range management plan.

For the comfort and productivity of the birds the temperature within the sheds must be regulated. The ventilation in each poultry house is provided by side inlets with low noise, high velocity, variable speed ridge outlets in the roof of the buildings. The fans will operate at a variable rate dependent upon the outside temperature and will only be switched off when the sheds are vacant.

Feed is purchased from a separately-owned feed mill and it is stored on site in fully-enclosed galvanised steel bins. Diets are formulated according to the birds’ requirements and the stage of growth. Protein and phosphorus levels are reduced over the laying period. Water is provided via nipple drinkers which are designed to minimise spillage. This, together with good environmental control in the houses helps to maintain good litter condition and hence reduce ammonia and odours. Water use in each house is monitored daily by meters. Low energy lighting systems are used throughout the site.

Bird mortalities are removed each day and the numbers are recorded. The carcasses are held in deep freezers prior to having sufficient volumes for collection under the Fallen Stock Scheme when the carcases are then transferred into covered, vermin-proof bins ready for collection.

The manure removal is undertaken twice weekly, facilitated by a belt system of manure removal. Waste is passed into covered trailers for application onto separately owned agricultural land (in line with NVZ regulations).

At the end of the laying period, all birds are removed from the houses and the used litter is taken away from the site in covered vehicles and spread onto separately owned agricultural land. A dry clean down and disinfection takes place ready for the next crop.

**Identification of Odour Sources**

Potential source of odorous emissions from the facility have been identified on the basis of a site visit and a review of the proposed development design. Existing and potential sources of odour and potential releases to atmosphere were identified.

The main potential sources of odour emissions can be summarised as follows:

* Housing - design and maintenance
* Feed - storage, management, feeding, preparation
* Manure / Litter - storage and management
* Livestock - management and Fallen stock
* Chemicals / diesel fuel / waste management

**Odour Source Risk Assessment**

In accordance with section 3 of the H4 Odour Management guidance a H1 Environmental Risk assessment has been completed, showing that the sources have been identified as contributing to a potential low / medium / high risk source.

Given the belt system for manure handling into covered trailers it is considered that, with the procedure undertaken in accordance with the manure management plan, the only potential odour sources are point sources from the laying shed ventilation.

The control of fugitive / intermittent releases of odour will be addressed in the ongoing site management activities and as part of the Environmental Risk Assessment process.

**Derivation of Emissions**

The odour emissions for the proposal have been estimated using values given in published literature in the UK and Europe for similar facilities. Ventilation flows are based on standard best practice design for UK egg laying houses.

**Ventilation flows**

The design and specification of the ventilation flows have been calculated based on the Best Available Technique for free range layer production units.

The fans will only operate at maximum design capacity on the hottest days. The total capacity of these units is similar to those on the existing shed as would be expected (for the same type and weight of birds). The farm is more likely to operate fewer fans but at maximum capacity than all fans at lower rates.

The temperature of the flows from the fan units has been assumed at 21ºC, which is typical for the existing facility, although this is partially dependent upon outside temperature.

**Emission Rates**

Odour emission rates can be calculated based on the factors presented in published research:

S. Fournel, F. Pelletier, S. Godbout, R. Lagace , J.J.R. Feddes (2012) *Odour emissions,hedonic tones and ammonia emissions from three cage layer housing systems*. Biosystems Engineering **112** (2012) 181 - 191

This data gives the mean odour emission rate from a laying farm as between **0.164** and **0.178ouE/s/hen**.

Unlike a broiler facility, there is little of the variability associated with the cropping cycle for laying farms as:

* + The grown birds are replaced only once every 60 weeks; and
  + The use of manure belts results in the regular (at least weekly) removal of waste products from the sheds.

There are clear odour benefits from the use of the belt system:

*‘The manure belt systems reduced between 37 and 42% (0.164 and 0.178 ouE/s/hen, respectively) odour emissions, between 43 and 44% (1.19 and 1.17 respectively) hedonic tones and between 92 and 94% (32.0 and 24.2 g/yr/hen, respectively) NH3 emissions with regard to the deep-pit system’*

Similarly, the seasonal variability was greatly reduced as a result of the regular waste removal.

***Building Downwash / Entrainment***

The location of the two laying sheds has been incorporated into the dispersion assessment.

The movement of air over and around buildings and other structures generates areas of flow re-circulation that can lead to increased ground level concentrations of pollutants in the immediate vicinity to the source.

Where the stack height is less than 2.5 times the height of any nearby building (within 5 stack heights), downwash effects and entrainment can be evident.

***Local Wind Speed and Direction Data***

The most important meteorological parameters governing the atmospheric dispersion of pollutants are as follows:

* Wind direction: determines the broad transport of the emission and the sector of the compass into which the emission is released;
* Wind speed: will affect ground level emissions by determining the initial dilution of pollutants emitted; and
* Atmospheric stability: is a measure of the turbulence, particularly of the vertical motions present.

A windrose providing the frequency of wind speed and direction for the data is attached in the appendix. The information has been compiled using a meteorological data set for the years 2011 – 2014 inclusive.

***Topography***

The presence of elevated terrain can significantly affect ground level concentrations of odour emitted from sources in a number of ways. Elevated terrain reduces the distance between the plume centre line and the ground level, thereby increasing ground level concentrations. Elevated terrain can also increase turbulence and, hence, plume mixing with the effect of increasing concentrations near to a source and reducing concentrations further away.

The laying sheds are situated at on relatively flat land. Information relating to the topography of the area surrounding the site forms an integral part of the potential dispersion of emissions from the site.

Vegetation barriers (trees / hedges) are said to provide a degree of shielding from odour impacts if planted between the source and potential receptor.

**Modelled Odour Emissions**

The typical emission rate and flow details are as follows:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Parameter** | **Shed 1**  **(proposed)** | **Shed 2 (proposed)** | **Shed 3 (proposed)** | **Shed 4 (proposed)** |
| Emission Rate Per Bird (ouE/s) | 0.178 | 0.178 | 0.178 | 0.178 |
| Number of Birds Per Shed | 16000 | 16000 | 16000 | 16000 |
| Emission Rate Per Shed (ouE/s) | 2848 | 2848 | 2848 | 2848 |
| Number of Stacks | 8 | 8 | 8 | 8 |
| Height (m) | 5.5 | 5.5 | 5.5 | 5.5 |
| Normal Velocity (m/s) | 3.46 | 3.46 | 3.46 | 3.46 |
| Temperature (ºC) | 21.0 | 21.0 | 21.0 | 21.0 |

**Potential Receptors, and relative impact risks**

Discrete receptor locations have been selected for comparative purposes to facilitate the assessment of predicted odour impacts; in general they represent the closest property locations in each direction. The location of each receptor is identified on the map in Appendix 8.2.

The main odour sources at the facility are the vent fans on the laying sheds. These will be regularly maintained to minimise the release of odour, including, where possible, during cleaning.

The estimated impact on sensitive receptors is detailed in appendix 8.3 and is well below the limit value of C98,1-hour 3 ouE/m3 at all receptors and as such odour impacts are below the Environment Agency limit for intensive agricultural operations.

Additional measures will not be necessary to further mitigate odour releases. Standard operational measures (i.e. *control of processes or emissions*) are matters for the environmental permitting process and are regulated through the Environmental Permit.

**Fugitive Emmissions**

Appropriate measures for preventing and minimising fugitive emissions are in place. The buildings are maintained in good repair. Areas around buildings are kept free from build-up of manure, slurry and spilt feed.

The poultry houses are dry cleaned at the end of each crop with compressors and vacuum cleaners reducing the risk of contamination.

***Dust***

Feed is stored in purpose built covered feed silos located next to the sheds. No milling or mixing of feed takes place at the farm. All feed is delivered to the farm by lorry from feed suppliers. Feed is blown directly from the lorry into the storage silos. Feed is piped from the silos to the sheds minimising dust emissions.

Ventilation systems are roof mounted high velocity fans and operated to achieve optimum temperature levels for the stage of production in all weather and seasonal conditions. Control of minimum ventilation rates is planned to avoid the build-up of moisture in the house.

The sheds are managed to maintain the poultry litter is as dry and friable condition as possible. Dust is controlled through the management of litter and air quality.

Rainwater run off from the roof for each shed is collected by the guttering system and routed to the attenuation pond as indicated on the site drainage plan. Rainwater run off around the yard end of the shed is collected by the drainage system which directs lightly contaminated runoff to the attenuation pond as indicated on the site drainage plan.

***Carcass management***

Fallen stock is disposed of in accordance with the Animal By-Products Regulations 2003. Carcasses are stored in freezers on site prior to collection in sealed containers under the fallen stock scheme.

***Agriculture Fuel oil and other chemical storage***

The fuel oil storage tank for the generator is bunded. The bunds meet the requirements of the Control of Pollution (Silage, Slurry and Agricultural Fuel Oil) Regulations 1991 (amended 1997) and meet the requirements outlined in SGN EPR6.09. The tanks are regularly inspected.

Pesticides and veterinary medicines are kept in a chemical store capable of retaining spillage, resistant to fire, dry, frost free and secure.

**Odour Management**

The Management techniques that will assist in the reduction of odour within a free range egg prouction facility include:

* Daily checks to detect abnormally high housekeeping odours
* Good litter management
* Stocking density per DEFRA welfare codes
* Appropriate feed for age and number of birds
* Maintenance and use of nipple drinkers
* Regular removal of manure offsite for disposal
* Clean and disinfect houses when empty
* Regular maintenance & cleaning of ventilation systems
* Collect dust deposits to reduce build up
* Maintenance of building structure
* Regular review of odour management plan

Further details on the actions taken against identified odour emissions are detailed in appendix 8.4.

The site manager is responsible for ensuring that the routine management checks and controls have been undertaken on a daily, weekly and monthly basis as applicable, which are recorded in the site recording sheets.

As part of the management activities on the site is the use of the Sniff Test to identify if there are any obvious signs of odour emissions beyond the site boundary or seepage from the sheds. The sniff tests will be undertaken by the site manager in line with the Environment agency Sniff Test Protocol detailed within the H4 guidance document.

**Manure Management**

Slurry spreading and manure management planning is an off site activity as follows:

* Litter is not stored or treated at the installation.
* Litter is not spread on land belonging to the Operator.
* Litter is exported from the installation.

Records are kept of the quantities and the date of transfer of the litter to farmers. The receiver of the manure confirms by signing a docket that litter is spread to land in accordance with the Code of Good Agricultural Practice, or in accordance with the manure management plan for the receiving land.

Contingency arrangements are in place with surrounding farms to accept the manure in case of an emergency. In these circumstances where the litter is exported for spreading to land, records are kept of the names and addresses of the receiving farms.

**Accident Management**

An emergency at the site is defined by the site management as follows:

“Any incident likely to result in harm to human health or pollution of the environment or serious breach of permit conditions and serious detriment to the amenities of the locality.”

The presence of a strong odour eminating from on the site is likely to be an indicator than an incident has occured due to the failure of a process or spillage of feed, spent litter, manure or diesel fuel. In such cases the site manager is to be informed in order to initiate contingency measures if necessary to deal with the incident in a timely and efficent manner to minimise any further inconvenience from the immediate incident and also establish corrective action to minimise reoccurance in the future.

When handling incidents these should be tackled in the with the site accident management plan.

**Odour Complaints Handling**

As part of the ongoing operation of the farm it is recognised that there maybe times were there is a need to listen to and respond to feedback from employees, neighbours, visitors or professional bodies a part of the continual improvement process of the farm operation.

An integral part of the improvement process is the operation of an effective complaint handling process.

In accordance with the Environment Agency H4 Odour Management guidance - Appendix 1, in the event of complaints being received related to odour management issues the complaint would be logged and investigated using the complaint process and form detailed in appendix 8.5.

**Periodic Review of Odour Management Plan**

Whilst the odour management plan is reviewed periodically (at least annually) to assess effectiveness of odour control measures, it will be reviewed more frequently if there are complaints or relevent changes to the operation of the site.

**Training and Awareness**

An Odour management plan is of little use without an effective routine of training and awareness for all those responsible for managing and undertaking the stock tasks that are essential to maintaining a high quality operation that provides natural stimulation for the chickens and encourages them to use every aspect of the range and facility whilst minimising odour and emissions.

It is a requirement for all site managers to read and understand the odour management plan and adhere to these requirements. Records of all training must be maintained and acknowledged with training taking place at least annually to act as a refresher programme for all.

##### Appendix 7.1 – Environmental Compliance Framework Odour Management Standards

EPR permit requirements state that if there are sensitive receptors (neighbouring dwelling houses) within 400 metres of the installation an Odour management plan must be established.

General guidance identifies a range of odour impact criteria depending primarily on the nature of the odour (i.e. its pleasantness / unpleasantness) and the likelihood of causing unacceptable impacts.

The odour unit is a standard unit in the same way as gram or milligram, the notation used in odour assessment follows the conventions of any mass emission unit as follows:

* + Concentration: ouE/m3;
  + Emission: ouE/s; and
  + Specific emission (emission per unit area): ouE/m2/s.

Like air quality standards for individual pollutants, exposure to odour is given in terms of a percentile of averages over the course of a year. This prevents results being skewed by infrequent meteorological conditions. The exposure criteria most accepted in the United Kingdom (UK) at present is given in terms of (concentration) European Odour Units as a 98th percentile (C98) of hourly averages. This allows 2% of the year when the impact may be above the limit criterion (175 hours). The notation for impact is therefore: C98, 1 hour *X* ouE/m3.

As the impact criterion is based on the 98th percentile of predicted of hourly average concentrations over a year, such criteria apply only to locations where an individual’s exposure is likely to occur for prolonged periods of time i.e. residential properties. Where exposure is more transient i.e. roads, footpaths etc the direct application of such criteria should be treated with caution and further consideration should be given to how the duration and frequency of exposure of the individual will influence the acceptability of the predicted impact.

**Environment Agency - H4 Guidance**

The Environment Agency guidance documents relating to odour assessment is the Horizontal Guidance EPR H4 – Odour Management, which states:

"Emissions from the activities shall be free from odour levels likely to cause pollution outside the site, unless the operator has used appropriate means, including those specified in an odour management plan, to prevent or where that is not practicable to minimise the odour."

The H4 guidance proposes the use of installation-specific exposure criteria (benchmarks) on

the basis that not all odours are equally offensive, and not all receptors are equally sensitive.

The conditions of a Permit will balance these installation-specific odour exposure criteria

against what is realistically achievable in accordance with the concept of Best Available

Techniques (BAT).

The Guidance places these in three categories with higher emission tolerance levels the more offensive the odour as follows:

***Highly offensive (Tolerance level 1.5 ouE/m3)***

• *processes involving animal or fish remains*

• *processes involving septic effluent or sludge*

• *biological landfill odours*

***Moderately offensive (Tolerance level 3.0 ouE/m3)***

* *well aerated green waste composting*
* ***intensive livestock rearing***
* *fat frying (food processing)*
* *sugar beet processing*

***Less offensive (Tolerance level 6.0 ouE/m3)***

* *brewery*
* *confectionery*
* *coffee roasting*
* *bakery’*

These benchmark limits may be relaxed in cases where the source is familiar to the location. This is particularly the case in relation to intensive agriculture in a rural setting.

**Odour Management at Intensive Livestock Installations (IPPC SRG 6.02)**

This guidance is specifically targeted at the pig and poultry sector, and includes many of the principles applied to all sectors regulated under IPPC referred to in the draft H4 Horizontal Guidance for odour.

These guidelines state that if there are sensitive receptors (neighbouring dwelling houses) within 400 metres of the installation. an Odour management plan must be established.

In relation to general principals of ‘acceptability’, this guidance describes that:

*‘In the case of odour, pollution is considered in terms of causing offence to the sense of smell, i.e. causing annoyance to people who live in the area or are there for some other reason, through exposure to odour. The point at which ‘pollution’ in the form of offence to the sense of smell is occurring, is taken to be the point at which there is ‘reasonable cause for annoyance’.*

*‘The aim of the legislation is to achieve ‘no reasonable cause for annoyance’ by persons beyond the boundary of the installation, i.e. sensitive receptors, as far as is possible using Best Available Techniques.’*

*‘The amount of annoyance should not be assessed only by means of the number of complaints. You should still use best practice to keep odour levels as low as reasonably possible where people live close by, even if complaints are rarely received.’*

In relation to requirements for mitigation, the guidance states that:

*‘The legislation requires that the amount that you spend on taking measures to reduce odour should be in proportion to the annoyance caused or potential to cause annoyance. Good practice should be adhered to at all times by all installations, but if a large number of complaints are received, or the installation is close to a built up area then you may have to expend more effort to reduce odour. BAT covers management techniques (i.e. Best Practice), as well as hardware, to control odour.*

*New installations will have to use BAT from the outset. Indicative sector BAT may help operators understand the requirements. As part of the planning process it is likely that an applicant will be required to undertake an odour impact assessment to predict the odour emission.’*

The odour impact criterion provided is consistent with that given in H4:

*‘The indicative exposure level criterion, which equates to ‘no pollution’, i.e. no reasonable cause for annoyance is:* ***3 ouE/m3*** *as a 98th percentile of hourly means at sensitive receptors, with such an adjustment as is appropriate to take account of local circumstances. This is the point at which the smell is recognisable e.g. as pig odour.’*

**How to comply with your environmental permit for intensive farming Appendices (EPR 6.09)**

EPR guidance 6.09 provides some additional guidance in relation to shed design and odour

control. This guidance includes the following:

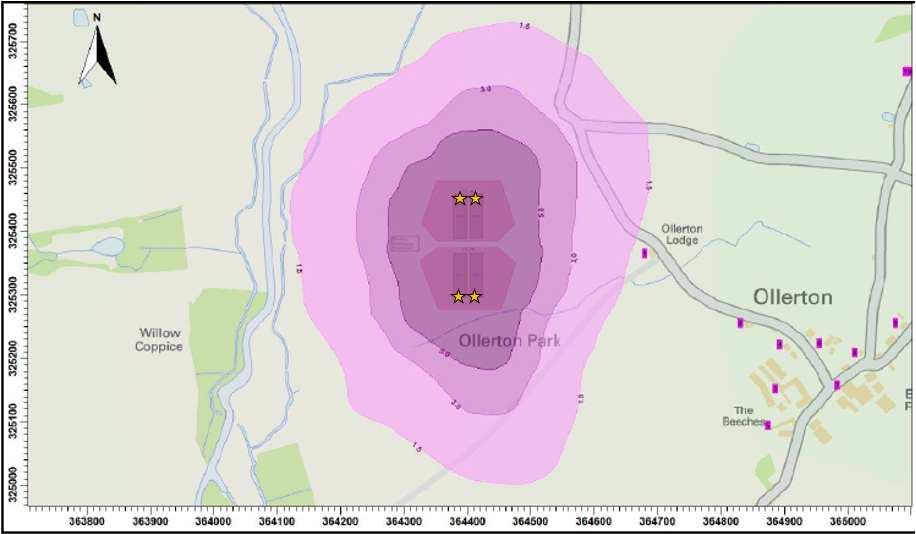
*‘The nature of intensive farming means that preventing odour generation at source is rarely possible as animals are inherently odorous. However, there are many things that can be done, often at low cost, to minimise odour or to prevent it reaching neighbours. Odour management is site specific - you will need to pick out those elements which most closely match your circumstances and add in any other sources or problems.*

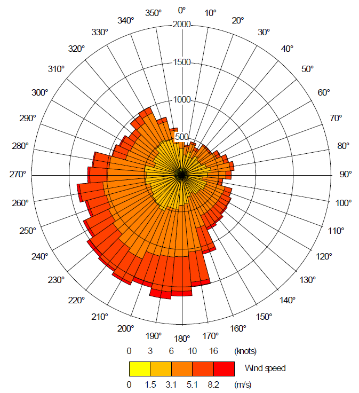
*In most cases, attention to housekeeping and good operational practices should achieve a significant reduction in the level of exposure experienced at sensitive receptors.*

*In cases where all reasonable measures have been taken and have failed to reduce emissions to the point where the exposure of sensitive receptors is acceptable then ‘end of pipe’ abatement may need to be considered. This may require odour to be contained at source and extracted to an abatement system with minimum fugitive losses. This is obviously a more expensive option so all effort should be made to improve the housekeeping aspects of the operation.’*

##### Appendix 7.2 - Site and Sensitive Receptor Location Map

Ollerton Park Farm - Ollerton, Shropshire, TF9 2DP



**Wind Rose:** 

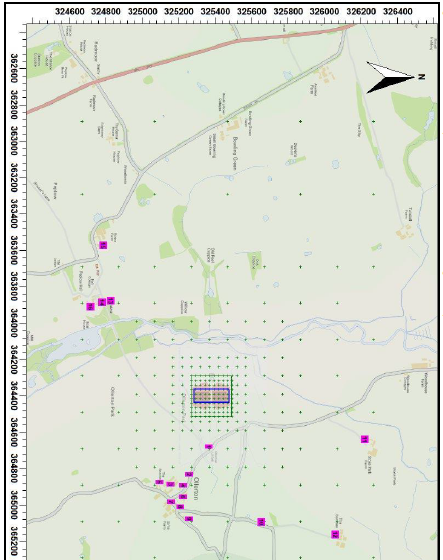
**KEY:**

**Potential Receptor**

**Ventilation point**

##### Appendix 7.3 - Potential Receptors, and relative impact risks

The discrete receptor locations have been selected for comparative purposes to facilitate the assessment of predicted odour impacts; in general they represent the closest property locations in each direction. The receptor site location, estimated Isopleth details and associated impact risk are detailed in the map and table below:



|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Receptor number | X(m) | Y(m) | Property | Maximum annual 98th percentile hourly mean odour concentration  (ouE/m3) |
| 1 | 364680 | 325366 | Ollerton Lodge | 1.24 |
| 2 | 364831 | 325255 | Kennels | 0.56 |
| 3 | 364886 | 325153 | Detached House | 0.46 |
| 4 | 364893 | 325222 | Detached House | 0.45 |
| 5 | 364874 | 325094 | The Beeches | 0.46 |
| 6 | 364955 | 325224 | Residences in Ollerton | 0.38 |
| 7 | 364983 | 325158 | Elms Farm | 0.35 |
| 8 | 365011 | 325209 | Residences in Ollerton | 0.32 |
| 9 | 365076 | 325255 | Whitehall | 0.28 |
| 10 | 365094 | 325652 | Residences NE Ollerton | 0.38 |
| 11 | 364640 | 326222 | Stoke Park Farm | 0.37 |
| 12 | 365163 | 326060 | The Bendles Farm | 0.27 |
| 13 | 363878 | 324827 | The Stables | 0.21 |
| 14 | 363886 | 324779 | Hall Cottages | 0.22 |
| 15 | 363575 | 324784 | Home Farm | 0.13 |
| 16 | 363909 | 324716 | Peplow Hall | 0.23 |

The impact on sensitive receptors is well below the limit value of C98, 1-hour 3 ouE/m3 at all receptors and as such odour impacts are below the Environment Agency limit for intensive agricultural operations.

##### Appendix 7.4 - Typical Odour Sources and Actions Taken to Minimise Odours

|  |  |  |  |
| --- | --- | --- | --- |
| **Odour Related Issue** | **Potential Risks and Problems** | **Actions taken to minimise odour and odour risks at the Farm** | **Completion date** |
| Manufacture and selection of feed | * Milling and mixing of compound feeds * The use of poor quality and odorous ingredients * Feeds which are ‘unbalanced’ in nutrients, leading to increased excretion and litter moisture and emissions of ammonia and other odorous compounds to air | * No on-site milling and mixing * Feed specifications are prepared by the feed compounder’s nutrition specialist covering each stage of production * Feed is supplied only from UKASTA accredited feed mills, so that only approved raw materials are used | In place |
| Feed delivery and storage | * Spillage of feed during delivery and storage * Creation of dust during feed delivery | * Feed delivery systems are sealed to minimise atmospheric dust * Any spillage of feed around the bin is immediately swept up * The condition of feed bins is checked frequently so that any damage or leaks can be identified | In place |
| Ventilation system | * Inadequate air movement in the house, leading to high humidity and wet litter * Inadequate system design, causing poor dispersal of odours | * The ventilation system is regularly adjusted according to the age and requirements of the flock * The ventilation system is designed to efficiently remove moisture from the house. | In place |
| Litter management | * Odours arising from wet litter (see above) * The use of insufficient or poor quality litter * Spillage of water from drinking systems * Disease outbreaks, leading to wet litter | * Controls on feed and ventilation (see above) help to maintain litter quality. Additional controls include:- * Use of nipple drinking systems which minimise spillage * Insulated walls and ceilings to prevent condensation * Concrete floors to prevent water ingress * Use of a health plan, with specialist veterinary input used as necessary | In place |
| Carcass disposal | * Inadequate storage of carcasses on site | * Carcasses are placed in sealed freezers immediately after they are removed form the house * Use of a purpose-designed sealed containers for collection of carcasses by Fallen Stock Scheme contractor | In place |
| **Odour Related Issue** | **Potential Risks and Problems** | **Actions taken to minimise odour and odour risks at the Farm** | **Completion date** |
| House Clean Out | * Creation of dust associated with litter removal from houses * Use of odorous products to clean houses | * Litter is carefully placed into trailers positioned at the entrance to each house. When full, the trailer is covered * Only approved and suitable products are used | In place |
| Used litter | * Storage of used litter on site * Transport of litter and applications to land | * There is no storage of used litter outside the houses at any time * The tipping height to the trailer is minimised * Litter is transported in covered trailers * Any litter which is land-spread is under the control of a separate farming business. A written agreement is in place | In place |
| Dirty water management | * ‘Standing’ dirty water during the production cycle or at clean out * Applications of dirty water to land | * Areas around the rear gable end of the houses are concreted and remain clean during the production cycle * At clean-out, dirty water is directed to underground tanks for storage. It is then spread onto land, under the control of a separate farming business. A written agreement is in place | In place |

##### Appendix 7.5 Complaint Handling

**Introduction**

As part of the ongoing operation of the Farm it is recognised that there maybe times were there is a need to listen to and respond to feedback from employees, neighbours, visitors or professional bodies a part of the continual improvement process of the farm operation.

An integral part of the improvement process is the operation of an effective complaint handling process.

**Complaint Records**

Any complaint received is required to be recorded on the complaint report form as attached.

Once received each complaint should be logged, including the name, address and contact number of the complainant.

The nature of the complaint should be recorded in as much detail as possible covering:

1. The type of complaint – people, boundary, emissions, odour, noise, compliance.
2. The time the issue was first identified, duration of issue, or frequency of reoccurance
3. The nature of emission release e.g what did it smell like, sound like
4. The weather conditions at the time of reporting the complaint - wind direction, strength, cloud cover.
5. The activity being undertaken onsite e.g. egg collection, litter removal, depletion, clean out, normal operation.

The complaint record is required to be signed and dated by the recipient and reviewed by the site manager.

**Review Process**

**Investigation**

The justification and cause of the complaint will then be investigated to validate the claims made and identify the reason for the complaint and route cause.

The outcome of the investigation would be added to the complaint log for future reference.

**Response**

The site manager is responsible for providing feedback to the complainant on the outcome of the investigation and the remedial action being taken to rectify their concerns.

It is expected that an initial response will be given within 48 hours of receiving a complaint (adequate to cover the majority of possible issues that could be identified) and a follow up call on completion of the investigation where the time will vary depending on the nature and complexity of the issue identified.

**Remedial Action**

Once the source of a problem is identified then immediate remedial action is needed to mitigate or remove the course for the complaint. This would be documented and signed off once compete in the complaint log.

**Enhancement to Control Processes**

Once the problem has been resolved a review is necessary to see how the farm control processes failed to pick up and rectify the issue in a timely manner that would have avoided the need for a complaint to be escalated.

Enhancements should then be proposed to the control framework e.g. an enhancement odour management process through increased frequency of monitoring or improvements in the spill containment practices.

**Escalation Option**

In the event that the complainant is unhappy with the action taken or is unwilling to identify themselves then the caller will be referred to the appropriate department of the Shropshire Council through contact number 0345 678 9000.

**Management Governance and Oversight**

The site manager is responsible for reporting details on the level and nature of all complaints at each Board meeting. This should include a report on the timeliness of responding to complainants and on completing agreed remedial actions.

**Complaint Record Form**

|  |  |  |
| --- | --- | --- |
| Installation: | Date received: | Date responded: |

|  |  |
| --- | --- |
| Complainant – Name: |  |
| Complainant Contact Details:  Address  Telephone Number: |  |
| Time and date of Incident |  |
| Nature of complaint – people, boundary, emissions, odour, noise, compliance |  |
| Description of Complaint:  (what look/sound/smell like, intensity, duration - constant/ intermittent).  *Intensity - no odour, very faint, faint, distinct, strong, very strong, extremely strong* |  |
| Any Other Comments raised by complainant? |  |
| Weather Conditions – Wind strength, wind direction, Cloud, Rain, fog, snow, temperature |  |
| Operating activity at time of Complaint – normal, litter removal, depletion, clean out, egg collection, feed delivery, fuel delivery |  |
| **Investigation** |  |
| Any Previous complaints linked to same exposure or other relevant information? |  |
| Potential sources of complaint  (identify if it originates from the site or elsewhere) |  |
| Remedial Action required |  |
| Date & time remedial action completed |  |
| **Response** |  |
| Date and Time Complainant contacted – phone / letter |  |
| Response from complainant to action taken. |  |
| Any follow on action needed? |  |
| Detail amendments required to site control management processes? |  |

|  |  |  |  |
| --- | --- | --- | --- |
| Form Completed by: |  | Sign & Date: |  |

Ref: Environment Agency H4 Odour Management Forms

# Appendix 8 – Noise Management Plan

**Introduction**

This Plan has been prepared as part of the EPR permit application to account for any sensitive receptors (neighbouring dwelling houses) within 400 metres of the installation, and as good management practice.

The purpose of this Plan is to: -

* Establish the likely sources of noise arising from a typical free range egg layer unit
* Set out the procedures followed at the Farm in order to prevent or minimise noise levels

The noise impact from the farm has been assessed as low.

The following table sets out the likely sources of noise and the procedures followed to minimise noise levels.

**Noise Management Plan**

|  |  |  |  |
| --- | --- | --- | --- |
| **No. Ref.** | **Typical Sources of Noise Problems** | **Actions taken at the Farm to prevent or minimise noise** | **Completion date** |
| 1 | Large vehicles travelling to and from the farm | * All vehicles are required to be driven onto and off the site with due consideration for neighbours * Deliveries of feed and fuel are made only during the daytime (between 0700 hours and 1800 hours), so that disturbance is minimised * Catching of birds often has to take place at night, but all vehicles are maintained so as to minimise engine noise and are driven slowly to and from the site * Potholes in installation roads to be filled in | In place |
| 2 | Large vehicles on site e.g. for –   * delivering feed * catching of birds at end of laying period (lorries, Moffat etc.) * removal of used litter from houses * collection of eggs from houses | * Vehicles have to be well maintained and must be driven slowly around the site * Engines to be switched off when not in use * Vehicles which are fitted with an audible ‘vehicle reversing’ warning system are generally used only in the daytime. The exception to this is during removal of birds from houses when such vehicles often have to be used at night. | In place |
| 3 | Small vehicles travelling to and from the farm (e.g. staff and visitor’s cars, courier van deliveries etc.) | * Highest risk is from catcher’s van. Because of likelihood of night time arrival, this must be driven slowly onto the site * Other small vehicles arrive during the normal working day and are therefore seen as low risk | In place |
| 4 | Feed transfer from lorry to bins | * Vehicles are well maintained and are designed so that noise during feed transfer is minimised | In place |
| 5 | Operation of fans | * Efficient extractor fans used, maintained in good condition to avoid excessive noise | In place |
| **No. Ref.** | **Typical Sources of Noise Problems** | **Actions taken at the Farm to prevent or minimise noise** | **Completion date** |
| 6 | Alarm system and stand-by generator | * Weekly system test (required by law) is carried out each Friday morning – timed in order to minimise nuisance to neighbours * All electrics and equipment are routinely maintained so that the back-up systems rarely need to be used in practice | In place |
| 7 | Chickens | * Noise from the birds is not considered to be a likely cause for complaint during the laying period * During loading, bird noise is minimised by careful handling and by prompt removal of the lorry from the site when full | In place |
| 8 | Personnel | * Staff, catchers and other contractors are required to carry out their work without creating excessive noise from shouting, use of radios etc | In place |
| 9 | Repairs | * If repairs to the site are required, the work is undertaken with due regard for possible noise nuisance and during the normal working day. * In the event of major repair work being undertaken which is likely to cause significant noise and disruption, neighbouring residents will be notified in advance. | In place |

# Appendix 9 – Dust and Bio-aerosol Management Plan

**Background**

This dust and bioaerosol risk assessment and management plan has been compiled as one is required where a site is within 100m of a sensitive receptor such as a farm house or a neighbour.

The purpose of this assessment is to:

* Establish the likely sources of dust and bioaerosols arising from the installation
* Set out operating practices used to mitigate or minimise the risk of dispersal
* Document the effective methods of dealing with any complaints quickly and efficiently.

The dust and bioaerosol management plan supports the overall environmental management system of the farm. The overriding principle of this plan is to ensure that the day to day activities are carried out in accordance with these guidelines so as to ensure that the environmental impact is minimised.

**Site location:**

The site is located in open countryside at Ollerton Park Farm, Ollerton, Shropshire, TF9 2DP

Grid Reference: SJ 644253

**Potentially impacted Receptors:**

Whilst there are currently no sensitive receptors within 100m of the poultry houses and the critical emission points, there is one property (Ollerton Lodge) that is within 100m of the site access road and another property (the Kennels) within 100m of the installation boundary.

Details of sensitive receptors within 100m of the installation boundary:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Receptor number | National Grid Reference | Property | Distance from Poultry Buildings | Distance from Installation Boundary |
| 1 | SJ 64689 25369 | Ollerton Lodge | 262m | 31m |
| 2 | SJ 64844 25255 | Kennels | 412m | 72m |

**Potential Sources**

In accordance with the ‘How to comply with your environmental permit for intensive farming’ a risk assessment has been undertaken. The full assessment is contained in the H1 Environmental Risk Assessment section of the submission.

As a result the main sources have been identified and assessed as contributing to a potential Low risk of dust or bio-aerosol impacts and these are summarised in the attached table (appendix 7.1).

A more expansive schedule of fugitive emissions is contained in the fugitive emissions section of the submission.

**Pathways and Receptors**

The pathway for all of the above sources is via the atmosphere.

The most sensitive receptors, being inhabitants of nearby farm managers and other residential dwellings will be significantly influenced by the direction of the prevailing wind. A profile of the dispersal of emissions has been assessed and is contained in the odour management plan.

The attached table provides a summary of the main at source and exhaust control methods for particle reduction from poultry farm installations. In addition all staff will receive training covering details on all aspects of the farm operation which could lead to pollution, including odour, noise, dust management as well as accident management and other general responsibilities under the environmental permit.

**Complaint Handling**

Any complaints received relating to dust or bio-aerosols are taken seriously being logged and handled through the sites complaint management process.

**Table 9.1 – At-source and exhaust control methods**

|  |  |  |  |
| --- | --- | --- | --- |
| **Source of Dust** | **Detail** | **Management Action to reduce impact** | **General Comments** |
| **General** | Daily activity and movements on farm | Inspection of the site as part of daily and weekly checks by farm manager | Look for signs of dust which may leave the installation boundary or be a hazard to staff or visitors. |
| **Poultry Feed** | Dust from Silos | Dust collectors (cyclones) are fitted on all silo exhaust pipes | Dust collectors should be connected and periodically checked. |
| Dust from extraction in feed mill areas | Not applicable – no feed milling on site. | - |
| Storage of feed | Feed is stored in enclosed silos and containers  Feed is not kept for longer than manufacturer recommendations to avoid build-up of dust. | Check for spills and rotation of feed silo usage. |
| Dust from Feed spill or deed delivery | Crash barriers are in place in front of feed bins to protect silos from damage.  Feed deliveries are monitored to avoid dust or spills.  Collection of any spilt feed undertaken immediately to avoid dust being generated | Good management practice avoiding possible contamination or pollution. |
| Type of feed | The type of feed is varied throughout the life of the flock in accordance with the feed suppliers nutritionist at a UKASTA accredited feed mill. | Good management practice. Suitable balanced feeds are used to avoid problems such as increased excretion and litter moisture causing higher ammonia emissions. |
| Feed delivery into shed and Feeding method | The feed is filled via auger pipes directly into enclosed hoppers to minimise dust or spillage. | The condition of the feed delivery system is checked for signs of wear on auger pipes or spillage around hoppers. |
| Over administration of feed | Feeding is controlled by computer and varied by age of birds to avoid over filling of hopper or feed runs. | Check for signs of spillage or damage to feed motors.  Controls on feed and ventilation help maintain litter quality and reduce dust. |
| **Bedding Material** | Application of bedding: bedding material is added as a manipulate able material | Bedding is applied internally to each section of the shed. | Wood chip shavings are used which have a larger particle size reducing impact.  Brush up any spillage whilst moving bedding inside sheds. |
| Management of bedding during flock | Maintain suitable humidity level to balance dust reduction and retain dry odour free litter. | Good management practice avoiding possible dust and minimising ammonia release. |
| Storage of bedding | Use good quality bedding material that has been kept dry and vermin free. Spare bedding is stored under cover in tote backs | Check for damage to bags and brush up any spillage. |
| **Manure removal system** | Slatted floors in an Aviary system in use with muck belts | Curtains in place to minimise dust during muck Clean up any muck spillage after mucking out. | Check muck belt areas to clean up any spillage. |
| Dust from storage of used litter | No muck is stored on site. It is removed in a high sided trailer which is covered before leaving site. | Litter is used by neigbouring farmers for spreading onto land. |
| **Shed Ventilation** | Ventilation is careful controlled, maintained and monitored to meet animal welfare requirements and to ensure efficient productivity. | Ventilation controlled by computers to optimise flow to match age of birds and seasonality of weather. Regular checking to be done to ensure fans and motors are well maintained. | Birds require careful control of airflow as they can be easily distressed by draughts. Increased ventilation with fans is often used in summer months. |
| **House Cleaning** | Each house is kept well maintained and any dust build up is removed to reduce disease and welfare risks to birds, new flock. | Concrete floors enable good house cleaning of all areas between flocks.  Sheds are blow down internally to contain dust. Focus on removal of dust build up in sheds and cleaning of exhaust systems to reduce contamination. | During flock any build-up of dust to be brushed up and removed. Between flocks a full clean out is undertaken with care to minimise and dispersal of dust to air or clean water drains. |
| **Building layout and design** | Building layout and design should conform to the best available technique. | The design of the ventilation system should provide adequate airflow and good air quality for animals and staff. |  |
|  | Housing designed to minimise the effect of high winds | Screens and wind breaks to be planted a part of range enrichment for birds. | Natural screens reduce odour and dust dispersal from site as well as reducing visual impacts and provide range enrichment. |
| **Birds** | Stocking Density | Maintained at optimal levels to prevent overcrowding. No thinning of birds is needed reducing dust impacts from catcher movements. | Good management practice avoiding possible disease and in adherence to welfare standards. |
| Carcass Disposal | Dust from feathers on dead birds is minimised by immediate collection and storage in freezer before collection in enclosed crates by DEFRA approved contractor. | Good management practice avoiding possible disease, contamination or pollution. |
| ***Control enhancements if base level controls are insufficient*** | | | |
| Dry filters | Collecting dust onto filters on exhaust vents | Cyclones on feed silos are empties at periodic intervals. | Good management practice |
| Electrostatic precipitation (ESP) devices | Attraction and collection of dust particles | Dust particles are collected in a tray or attracted to earthed surfaces. | Not required given current level of impact.  Currently viability for commercial poultry sites unproven. |
| Scrubbers | Bio filters and wet scrubbers (water and acid) | Air passes through water scrubber to remove larger dust particles. Air then passes over beds of plant material to remove dust, odour and microbes, 99% of ammonia molecules can be removed. | Not considered necessary given the low level of ammonia impact from the site. |

# Appendix 10 – Raw Materials

**Efficient Use of Raw Materials**

All raw materials used have to be compliant with the requirements of customers and assurance schemes and also meet all legal requirements. The use of potable water is essential. The choice and quantity of litter materials is based on its ability to maintain friability throughout the production cycle. Medications are used rarely and only in consultation with a veterinary specialist. All disinfectants used must be Defra approved and all feed used must be UFAS approved.

**Raw Material Schedule**

The raw materials inventory is provided separately as the electronic form does not accept units other than tonnes.

|  |  |  |  |
| --- | --- | --- | --- |
| **Inventory of Raw Materials** | **On approved lists** | **Quantity used (litres or kg per year)** | **Quantity stored on site (litres or kg)** |
| **a) Biocides (includes disinfectants, wood preservatives)** | | |  |
| Disinfectants | Yes (Defra approved) | 200litres | 25litres |
| **b) Pesticides (including herbicides, vertebrate control products, biological pesticides)** | | |  |
| Rodenticide | Yes (Pesticides Blue Book) | 50kg | 25kg |
| Insecticide | Yes (Pesticides Blue Book) | 50 litres | 5litres |
| **c) Veterinary medicines (excluding dietary additives)** | |  |  |
| IB Vaccine | Yes |  |  |
| **d) Bedding types** |  |  |  |
| Wood shavings | Not applicable | 8 tonnes | 2 tonnes |
| **e) Fuels and Oils** |  |  |  |
| Red Diesel | Not applicable | 3000 litres | 1200 litres |
| Petrol (for Chainsaw/strimmer) | Not applicable | 50 litres | 10 litres |

The inventory is kept with the accident management plan and is reviewed every 4 years and updated if alternative products are available.

Water usage is monitored throughout the flock cycle and records are kept.

# Appendix 11 – Energy Efficiency

**Energy Efficiency**

Energy-efficiency is a priority and was a key requirement in the design and construction of the houses.

The following are seen as priority areas:-

* Good insulation of roofs and walls – as well as helping to maintain an appropriate temperature and thereby prevent high feed consumption in winter, this is consistent with maintaining good, dry litter.
* Fans are modern and designed, serviced and maintained to ensure high air throughputs per unit of energy input
* Careful control of ventilation systems, to prevent low temperatures
* Use of low energy lighting, in order to reduce electricity use
* Concrete floors have a plastic course to prevent dampness rising into the houses from the ground

**Energy Changes**

Energy use is monitored for each flock, as a basis for making improvements. Any deviations from the expected will be investigated.

**Climate Change**

In addition to the measures outlined above, we aim to maintain or improve our energy efficiency by monitoring:-

* Electricity use (e.g. for ventilation systems, feeders, lighting, egg collection etc.) on a ‘per flock’ basis
* Water use whilst the houses are stocked (water consumption by the birds)

The quantity of chemicals used is also monitored to ensure efficiency whilst recognising the importance of maintaining biosecurity standards.

**Energy usage at the Farm**

|  |  |
| --- | --- |
| **Energy source** | **Use** |
| Electricity | Lighting, ventilation, computer control systems, feed augers, water pumps |
| Diesel | Standby generator and vehicles. |

**Heating**

There is no supplementary heat provided for the laying stock kept on the farm.

The correct environment for the birds is maintained in the sheds through a combination of the heat generated from the birds bodies and ventilation fans located in the gable end wall of each shed.

Each shed will be monitored and controlled by a computer system, which automatically controls and records the temperature.

The sheds will be constructed to ensure litter is kept dry and friable and avoid the need to heat the sheds to keep the litter dry.

**Electricity**

The ventilation fans in both the new and existing sheds have been selected so that they are appropriate power and size for the sheds.

The computer control systems control the ventilation for maximum efficiency i.e. one fan operating at full capacity rather than two operating on half their capacity.

The fans are low energy per m3 of air.

The fans are regularly maintained, and cleared of debris.

Fluorescent lights will be used in the control/vestibule areas, the office and stores.

Fluorescent lights will be used in the sheds.

We operate a variable lighting period during the laying cycle.

**Fuel Oil**

The standby generator is regularly maintained in accordance with the manufacturers’ instructions to ensure it operates efficiently.

# Appendix 12 – Waste Management

The main wastes identified are carcasses, plastics (from containers and packaging) and used lights. All efforts are taken to minimise mortality rates and carcasses are disposed off site via the Fallen Stock Scheme.

Cleaning and disinfection products are the main source of plastic wastes – these are considered essential for bio-security and are used in compliance with manufacturer’s instructions. Waste is removed from the site by a registered contractor and records are kept.

Within 2 years of the permit being granted a waste review will be undertaken to identify whether appropriate measures to ensure minimal waste is produced need to be updated and changed.

Areas of waste which have already been reviewed as part of the application process include:

* The delivery of raw materials in bulk whenever possible to minimise transportation and packaging
* Minimal storage of chemicals and other raw materials on site to reduce waste
* Efficient use of feed to avoid waste
* Identification of recyclable materials e.g. plastic wrap, cardboard egg trays.